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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/780,751		02/19/2004	Yoshiaki Nagashima	A8319.0034/P034	1787	
24998	7590	06/14/2005		EXAM	INER	
DICKSTEI	N SHAP	IRO MORIN & C	CHAPMAN JR, JOHN E			
2101 L Stree Washington,	•	)37		ART UNIT	PAPER NUMBER	
				2856		

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	AIL
	10/780,751	NAGASHIMA ET AL.	
Office Action Summary	Examiner	Art Unit	
·	John E. Chapman	2856	
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet with the	ne correspondence address	
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a r  - If NO period for reply is specified above, the maximum statutory perion  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply to the statutory minimum of thirty (30) and will apply and will expire SIX (6) MONTHS tute, cause the application to become ABAND	be timely filed  days will be considered timely.  from the mailing date of this communication.  ONED (35 U.S.C. § 133).	
Status .			•
1) Responsive to communication(s) filed on			
,	his action is non-final.		
3) Since this application is in condition for allow	•	<u>·</u>	
closed in accordance with the practice unde	r Εχ paπe Quayle, 1935 C.D. 11	, 453 O.G. 213.	
Disposition of Claims			
4) ☐ Claim(s) 1-21 is/are pending in the application 4a) Of the above claim(s) is/are withdress 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 and 9-13 is/are rejected. 7) ☐ Claim(s) 7,8 and 14-21 is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the	ccepted or b) objected to by the drawing(s) be held in abeyance. ection is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a li	ents have been received. ents have been received in Application of the properties of the proper	cation No eived in this National Stage	
Add a box and (a)			
Attachment(s)  1) X Notice of References Cited (PTO-892)	4) Interview Sumn	nary (PTO-413)	
<ul> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 2/19/04; 8/30/04.</li> </ul>	Paper No(s)/Ma		

## **DETAILED ACTION**

1. Claims 1, 7, 9, 12 and 14 are objected to because of the following informalities:

Regarding claim 1, --inspection-- should follow "nondestructive" in line 1 in order to be consistent with claims 2-11.

Regarding claim 7, "one of said transmission waveforms" in line 4 should be changed to --one transmission waveform--.

Regarding claim 9, "and said receiving element" in line 5-6 should be deleted.

· Regarding claim 12, "means" in line 3 should be deleted.

Regarding claim 14, "said transmission waveforms" in line 7-8 should be changed to --at least one transmission waveform with respect to--.

Appropriate correction is required.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is unclear. It is not clear what it means for transmission waves to be formed "in such a manner that said calculated reception waveforms are sequentially transmitted from such a reception waveform whose reception time is delayed."

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Regarding claim 9, there is no antecedent basis for "said guided wave transmitting means and said guided wave receiving means" in lines 11-12. It is not clear whether applicant intends "said waveform forming means and said analyzing means."

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 5, 6, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Rose et al. (5,734,588).

Rose discloses a nondestructive apparatus using a guided wave wherein a waveform is generated and reflected waveforms are received and displayed. Any waveform, such as a waveform with a particular frequency or mode, may be taken to be a "reference" waveform, since the claims do not specify any particular for the reference waveform nor any particular manner of employing it. Indeed, the tone burst 31 may be taken to be a "reference" waveform.

Regarding claim 3, an echo waveform is "wanted to be received" by the receiving element when there is water loading, and the transmission waveform is selected so as to provide an echo waveform at the receiving element when there is water loading.

Regarding claim 13, points b and c in Fig. 6 satisfy the recited condition.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (5,734,588) in view of Lam et al. (6,578,422).

The only difference between the claimed invention and the prior art consists in scanning along a circumference of a pipe and providing a two-dimensional display of an inspection image. Lam et al. teaches displaying a flaw location in a two-dimensional display in which the horizontal axis is the tubular length and the vertical axis is the tubular circumference (column 10, lines 50-53). It would have been obvious to one of ordinary skill in the art to provide a circumferential scan of the pipe of Rose et al. in order to display a flaw location in a two-dimensional display in which the horizontal axis is the pipe's length and the vertical axis is the pipe's circumference.

- 8. Claims 7, 8 and 14-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John E. Chapman whose telephone number is (571) 272-2191. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John E Chapman Primary Examiner Art Unit 2856